

PATENT  
Atty. Dkt. No. ATT/2002-0457**IN THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**RECEIVED  
CENTRAL FAX CENTER  
MAR 20 2008**

Claims 1-5 (Canceled).

6. (Currently Amended) A method to provide ~~for providing~~ a data management system, comprising:

preprocessing a database having a relation to produce an index, wherein said preprocessing step comprises:

identifying a dominating vector of constants,  $\bar{c}$ , for a given n-dimensional vector of constants  $\bar{c}$ ;

receiving a query having aggregation constraints, wherein said aggregation constraints are Optimization under Parametric Aggregation Constraints (OPACs);

applying said index to look up a result in response to said query having aggregation constraints; and  
providing said result.

7. (Original) The method of claim 6, wherein said preprocessing step further comprises:

obtaining a partition defined by said vector  $\bar{c}$  and said vector  $\bar{c}'$ .

8. (Original) The method of claim 7, wherein said partition is expressed as a hyper rectangle.

9. (Original) The method of claim 7, wherein said preprocessing step further comprises:

inserting said partition into a multidimensional data structure.

PATENT  
Atty. Dkt. No. ATT/2002-0457

10. (Original) The method of claim 9, wherein said multidimensional data structure is an R-Tree.

Claims 11-24 (Canceled).